



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/509,147 | 05/25/2000 | MARK LADLOW | 58937/123 | 1696 |

7590

06/19/2002

MICHAEL D RECHTIN
FOLEY & LARDNER
330 NORTH WABASH AVENUE
SUITE 3300
CHICAGO, IL 60611-3608

EXAMINER

GORDON, BRIAN R

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 06/19/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

2010
Office Action Summary

Application No.

09/509,147

Applicant(s)

LADLOW ET AL.

Examiner

Brian R. Gordon

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 February 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In light of applicant's amendment/arguments filed February 14, 2002, the examiner hereby withdraws the previous objections to the drawings in reference to the "fixing means", "gas manifold", and the adapter block and condenser. However, the 112 rejection as directed to the "guide means" of claim 2 is maintained. *ok*
2. In light of applicant's arguments, the objection to the specification as directed to the operation of the magnetic stirrer and fixing means of claim 1 is hereby withdrawn.
3. In light of applicant's amendment, the 112 rejection of claims 1-10 as directed to the "fixing means" is hereby withdrawn.
4. In light of applicant's amendment, the 112 rejections of claims 11-12 are hereby withdrawn.
5. Applicant's arguments with respect to claims 1-5, 8-9, and 11-12 have been considered but are moot in view of the new ground(s) of rejection.

Specification

ok

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

Art Unit: 1743

- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Applicant's specification does not contain the section headings as given above: correction is request.

Drawings

6. The corrected or substitute drawings were received on February 14, 2002.

OK

These drawings are not accepted.

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "guide means" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The guide means of claim 1 is not labeled in the drawings and it is not referenced in the specification with a numeral to allow the examiner to distinguish what the element is and where it is located.

Response to Amendment

8. The amendment filed February 27, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The "base" as recited in claims 1, 11, 14 is an element that is not recited in the original specification. The "base portion" of claims 16, 18, and 20 has no antecedent basis in the claims as well as it is not recited in the original specification as being "held substantially at the level or the recess".

OK

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1 it is unclear if applicant's intentions are to claim the magnetic stirrer as an element of the invention. However, applicant has stated that "magnetic stirring systems are conventional" and therefore the employment of an adapter block would be an improvement of a conventional stirrer (as claimed in claims 11 and 13). The examiner considers the invention of claim 1 as an adapter block that may be used in conjunction with a magnetic stirrer, for the phrase "for seating on a laboratory magnetic

OK

stirrer" indicates intended use of the block but does not further limit the structure of the adapter block. The block has been interpreted to incorporate a recess, fixing means with different positions for holding vessels with the center of each vessel distributed around the recess outside "its" periphery.

It is unclear what element "its" is referring in the last line of claim 1. *OK*

As to claims 2 and 3, they essentially claim the same device that incorporates a guide means. The only difference in the claims is the purpose of the guide means which does not provide any structural differences. *OK*

As to claim 11, it is unclear what element "its" is referring to in line 5. *OK*

As to claim 15, it is unclear what element "its" is referring to in line 2. *OK*

11. Claims 6, 10, 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: As to claims 6 and 12-13, which simply recite that the device incorporates a condenser, it is unclear how the condenser is structurally related to the other elements of the device. By simply stating the device incorporates a condenser does not provide a clear structural relationship of the components and their location. As to claim 10, which recites the device comprises a gas manifold, it is unclear how the manifold is incorporated in the device for no structural description is given to determine where the manifold is located in reference to the other elements of the device. As to claim 12, it is also unclear what is the structural relationship of the hotplate and how it is incorporated into the device.

Art Unit: 1743

12. Claim 13 recites the limitations "the magnetic field" and "the laboratory magnetic stirrer" in line 3. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by A. R. Jones 3,594,129.

The analyzer of Jones comprises a turntable (adapter block) that has a series of openings (fixing means) 16 in a ring (guide means) 17 on its periphery for holding vessels 18. The turntable rotates above the platform which it is fitted via a recess (see figures). The vessels may be rotated to an appropriate position to allow the dispensing of a reagent into the vessel to allow for the observation of a reaction.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1743

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 1-5, 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsberger, US Patent 3,356,346 in view of A. R. Jones 3,594,129.

Landsberger discloses a test tube stirring block for use in combination with a stirring machine. The support block 10 is made of vinyl material which allows it to hold a plurality of test tubes 12 (of any size) in apertures 20 (sockets) located about the perimeter of the circular block 10. While the fluid is in the test tubes it is stirred by a stirring magnet 26 that is attracted and repelled by conventional means such as a magnetic stirring machine. As seen in Figure 1 the test tubes are automatically guided into the appropriate position for stirring as they are placed within the apertures.

Landsberger does not disclose that adapter block is chemical resistant and each vessel is located in a position around the periphery of the recess.

The analyzer of Jones comprises a turntable (adapter block) that has a series of openings (fixing means) 16 in a ring (guide means) 17 on its periphery for holding vessels 18. The turntable rotates above the platform which it is fitted via a recess (see figures). The vessels may be rotated to an appropriate position to allow the dispensing of a reagent into the vessel to allow for the observation of a reaction.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Landsberger by incorporating the teachings of Jones in order to allow the block (turntable) to have the vessels located outside the periphery of the recess in order to allow the block to rotate to a position to allow liquid to be dispensed in the vessels for mixing and observing the reactions.

As to claim 7, it is obvious that all materials conduct heat to some extent. However, it is also well known in the art and conventional for magnetic stirrers to incorporate hotplates which conduct heat to the samples being stirred. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device by fabricating the block or holder of a conductive material to allow for simultaneous heating and stirring.

19. Claims 6, 10, and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Landsberger, US Patent 3,356,346 in view of A. R. Jones 3,594,129 as applied to claims 1-5, 7-9 and 11 above, and further in view of Baker 97/09353.

The modified teachings of Landsberger in view of Jones do not disclose that the device incorporates a gas manifold/condenser.

Baker however discloses a synthesis block in which vessels may be placed and heated to the desired reaction temperature. The device comprises a temperature control block 18 (gas manifold) that incorporates a gas inlet for heating and cooling water inlet and outlet (condenser) to allow for the optimum heating and cooling of the chemical reagents in the vessels.

It would have been obvious to one of ordinary skill the art to modify the modified hotplate stirrer of Landsberger in view of Jones by also incorporating the heating and cooling system of Barker to allow for optimum control of the heating and cooling of the reagents contained in the vessels of the block.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kindmann et al. discloses a stirring and heating/cooling device.

Berglund et al., Manabe, and Testeeg et al. disclose chemical analyzers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is (703) 305-0399. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7719 for regular communications and (703) 305-3014 for After Final communications.

Art Unit: 1743

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

brg
June 13, 2002

A handwritten signature in cursive script that reads "Arlen Soderquist".

ARLEN SODERQUIST
PRIMARY EXAMINER